

**TABLE 2 (1 of 4)**  
**SPECIMENSELECTION <sup>1</sup>**

DISEASE/ AGENT	SPECIMENSELECTION	TIME AND TEMP		SPECIMEN PLATING AND PROCESSING					
		Transport	Storage	SBA	CA	MAC	STAIN	OTHER	
<b>Anthrax</b>	Cutaneous	<b>Vesicular Stage</b> : collect fluid from intact vesicles on sterile swab(s). The organism is best demonstrated in this stage.	≤2h RT	≤24h RT	X	X	X	Gram stain	India Ink for capsule
		<b>Eschar Stage</b> : without removing eschar, insert swab beneath the edge of eschar, rotate and collect lesion material.	≤2h RT	≤24h RT	X	X	X	Gram stain	India Ink for capsule
	Gastro- Intestinal	<b>Stool</b> : collect 5-10g in a clean, sterile, leak-proof container.	≤1h RT	≤24h 4°C	Inoculate routinely stool plating media plus CNA or PEA.				Minimal recovery
		<b>Blood</b> : collect per institution's procedure for routine blood cultures.	≤2h RT	★	Blood culture bottles			Positive in late stages of disease.	
	Inhalation	<b>Sputum</b> : collect expectorated specimen into a sterile, leak proof container.	≤2h RT	≤24h 4°C	X	X	X	Gram stain	Minimal recovery
		<b>Blood</b> : collect per institution's procedure for routine blood culture.	≤2h RT	★	Blood culture bottles			Positive in late stages of disease.	
<b>Brucellosis</b>	Acute, subacute or chronic	<b>Serum</b> : collect 10-12cc acute phase specimen as soon as possible after disease onset. Followed by a convalescent specimen, obtained 21 days later.	~2h RT	-20°C	Specimens should be stored and shipped frozen @ -20°C			Serologic diagnosis: 1. Single titer: ≥1:160 2. 4-fold rise 3. IgM	
		<b>Blood</b> : collect per institution's procedure for routine blood culture.	≤2h RT	★	Blood culture bottles hold 21 days			Blood culture isolation rates vary from 15-70% depending on methods and length of incubation	
		<b>Bone Marrow, Spleen or liver</b> : collect per institution's surgical/pathology procedure	≤15min RT	≤24h RT	X	X	X	Gram stain	India Ink for capsule, and add blood culture bottles or enrichment broth

holdculturesforat  
least7days

**TABLE 2 (2of4)  
SPECIMENSELECTION**

DISEASE/ AGENT	SPECIMENSELECTION				SPECIMEN HANDLING		COMMENTS	
	Specimen Type	ClinicalSyndrome				Specimen volume		Transpo rtemp
<b>Botulism</b>		Foodborne	Infant	Wound	Intentional Release			<b>Specimen(s)ofchoiceforconfirmingbotulism:</b> <b>a.Serum</b> <b>b.Wound/tissue</b> <b>c.Stoolandincriminatedfood</b>
	EnemaFluid	X	X	X	X	20cc	4°C	
	FoodSample	X	X		X	10-50g	4°C	Foodsthat support <i>C.botulinum</i> growthwillhavea pHof3.5-7.0,mostcommonpHis5.5-6.5.Submit foodinoriginalcontainer,placingindividuallyinleak proofsealedtransportdevices.
	GastricFluid	X,A				20cc	4°C	Collectupto20cc
	IntestinalFluid	A	A			20cc	4°C	Autopsy:intestinalcontentsfromvariousareasofthe smallandlargeintestinesshouldbeprovided
	Nasalswab				X	anaerobic swab	RT	Foraerosolizedbotulinumtoxinexposure,obtain nasalculturesfor <i>C.botulinum</i> andserumformouse toxicitytesting
	Serum	X,A		X	X	10-12cc	4°C	Serumshouldbeobtainedasoonaspossibleafterthe onsetofsymptomsandbeforeantitoxinisgiven.A minimumof10ccofserum(20ccofwholeblood)is requiredformousetoxicitytesting.Ininfants,serum isgenerally,notuseful,sincethetoxinisquickly absorbedbeforeserumcanbeobtained.
	Stool	X	X	X	X	10-50g	4°C	Botulismhasbeenconfirmedininfantswithonly “pea-sized”stools.Pleasenote:anticholinesterase givenorally,asinpatientswithmyastheniagravis,has beenshowntointerferewithtoxintesting
	Vomitus	X				20cc	4°C	Collectupto20cc
	Wound/tissue			X		Anaerobic swabor transport system	RT	Exudate,tissueorswabsmustbecollectedand transportedinanaerobictransportsystem.Samples fromanenemaorfecesshouldalsobesubmittedsince thewoundmaynotbethesourceofbotulinum-toxin
	Environmental sample		X		X		RT	Environmentalswabs

**TABLE2 (3of4)  
SPECIMENSELECTION**

DISEASE/ AGENT	SPECIMENSELECTION	TIMEAND TEMP		SPECIMENPLATING ANDPROCESSING					
		Transport	Storage	SBA	CA	MAC	STAIN	OTHER	
<b>Plague</b>	Pneumonic	<b>Sputum/throat:</b> collectroutinethroatculture usingaswaborexpectoratedsputumcollected intoasterile,leakproofcontainer.	≤2h RT	≤24h 4°C	X	X	X	Gram stain	Minimalrecovery. Preparesmearsfor Wayson(andDFA referral)
		<b>Bronchial/trachealwash :</b> collectper institution'sprocedureinanaareadedicatedto collectingrespiratoryspecimensunder isolation/containmentcircumstances,i.e., isolationchamber/"bubble".	≤2h RT	≤24h 4°C	X	X	X	Gram stain	Preparesmearsfor Waysonstain(and DFAreferral)
		<b>Blood:</b> collectperinstitution'sprocedurefor routinebloodcultures.	≤2h RT	★	Bloodculturebottles			Patientswithnegative cultures havingasingletiter, ≥1:10, specifictofIantigenby agglutinationwouldmeet presumptivecriteria	
<b>Tularemia</b>	Pneumonic	<b>Sputum/throat:</b> collectroutinethroatculture usingaswaborexpectoratedsputumcollected intoasterile,leakproofcontainer.	≤2h RT	≤24h 4°C	X	X	X	Gram stain	Minimalrecovery. AddaBCYEplate andpreparesmears forDFAreferral
		<b>Bronchial/trachealwash :</b> collectper institution'sprocedureinanaareadedicatedto collectingrespiratoryspecimensunder isolation/containmentcircumstances,i.e., isolationchamber/"bubble"	≤2h RT	≤24h 4°C	X	X	X	Gram stain	AddaBCYEplate andpreparesmears forDFAreferral.
		<b>Blood:</b> collectperinstitution'sprocedurefor routinebloodcultures.	≤2h RT	★	Bloodculturebottles.			Bloodcultureshave rarely beenpositive.Apositive DFAfromanulcer/wound, tissues,andculturesORa positiveserologytestwould meetpre-sumptivecriteria. Whereas,confirmation requirescultureidentification ora4-foldrise	

**TABLE 2 (4 of 4)  
SPECIMEN SELECTION**

DISEASE/ AGENT	SPECIMEN SELECTION	TIME AND TEMP		SPECIMEN HANDLING AND TRANSPORT	
		Transport	Storage		
<b>Smallpox</b>	Rash	<b>Biopsy specimens</b> : aseptically place two of four portions of tissue into a sterile, leak proof, freezable container.	~6h 4°C	-20°C to -70°C	1. A suspected case of smallpox should be reported immediately to the respective state health department for review 2. And if, after review, smallpox is still suspected, CDC's Poxvirus Section @ 404-639-2184 should be contacted for approval to send 3. At this time review the packaging/shipping requirements with CDC and request assistance in coordinating a carrier for transport/shipment
		<b>Scabs</b> : aseptically place scrapings/material into a sterile, leak proof, freezable container.	~6h 4°C	-20°C to -70°C	
		<b>Vesicular fluid</b> : collect fluid from separate lesions on to separate sterile swabs. Be sure to include cellular material from the base of each respective vesicle.	~6h 4°C	-20°C to -70°C	
<b>VHF</b>		<b>Serum</b> : collect 10-12cc of serum. Laboratory tests used to diagnose VHF include: antigen-capture ELISA, IgG ELISA, PCR, and virus isolation.	~2h RT	-4°C	Specific handling conditions are recurrently under development..

1 Abbreviations: ★, delayed entry depends on instrument; A, autopsy; BCYE, buffered charcoal-yeast extract agar; C, centigrade; CA, chocolate agar; CNA, colistin-nalidixic acid agar; DFA, direct fluorescent antibody; g, grams; h, hours; MAC, MacConkey agar; PEA, phenylethyl alcohol blood agar; RT, room temperature